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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,652	08/26/2003	Thomas Brendel	03100131US	2125

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EXAMINER

BOTTORFF, CHRISTOPHER

ART UNIT	PAPER NUMBER
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3618

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/04/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/647,652

Applicant(s)

BRENDDEL, THOMAS

Examiner

Christopher Bottorff

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12, 13, 17, 19, 20 is/are allowed.
- 6) ☒ Claim(s) 1-11, 14-16 and 18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

The amendment filed October 25, 2006 has been entered. Claims 1-20 are pending.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9, 15, 16, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Körber et al. US 4,953,645 in view of Lee US 6,302,421.

Körber et al. disclose a wheelchair having two driven wheels 3 and at least one castor 5 which is mounted in a rotatable manner in a fork 16 which can be pivoted about a vertical axis. See Figure 4. The driven wheels 3 are arranged in front of a seat back of a seat system when the wheelchair is configured for outdoor use and, when configured for outdoor use, the castor 5 is arranged behind the two driven wheels. See column 3, lines 18-22. The fork 16 is connected to a steering linkage 20, wherein the connection between the fork 16 and the steering linkage 20 is releasable through coupling 17. See Figure 4 and column 4, lines 12-17, 19-21, 37-39, and 52-55. Also, Figure 2 and column 3, lines 42-52, provide further explanation of the caster components and coupling 17.

The at least one caster comprises two castors 5 each mounted in a fork 16. See Figure 4. The forks 16 are connected to one another via the steering linkage 20. See Figure 4. The forks 16 are mounted such that each can be rotated about a vertical axis through 360 degrees. See Figure 4. The forks can be blocked mechanically in relation to the steering linkage through coupling 17, and can be blocked in the straight-ahead position of the castors through coupling 17 unless steered in another direction. See Figure 4 and column 4, lines 19-21, 37-39, and 52-55. Also, the forks 16 are each mounted, via a fork pin 15 in a bushing (shown in Figure 2 supporting pin 15 above fork 16) connected to a frame 1. See Figures 4 and 2.

Körber et al. do not disclose that the connection between the fork and the steering linkage is releasable by actuation of a bolt that is subject to a load by a spring or that the fork pin is mounted via bearings in the bushing. However, Lee discloses the desirability of connecting a fork 12F and a steering linkage 34, 38 of a wheelchair such that the fork 12F may be mechanically blocked in relation to the steering linkage 34, 38 and the connection is releasable by actuation of a bolt in coupling 32 which is subject to a load by a spring. See Figures 1B, 1M and 1N; column 8, lines 49-50 and 62-67; and column 11, lines 45-55. The bolt can be pushed, transversely to the vertical axis, into the recess 12D in the fork pin 12A. See Figures 1M and 1N. The bolt is subjected to loading by a compression spring and can be displaced counter to the force of the compression spring. See column 8, lines 62-67. The bolt is connected to an actuating lever (formed by the ring disposed on the end of the pin opposite fork pin 12A), which is mounted in a pivotable manner on a spindle (formed by the coupling housing that

surrounds and supports the pin in coupling 32). See Figure 1N. Also, the forks 12F are each mounted, via the fork pin 12A and bearings, in a bushing 12B. See Figure 1N.

From the teachings of Lee, providing a connection between the fork and the steering linkage of Körber et al. such that the connection is releasable by actuation of a bolt that is subject to a load by a spring would have been obvious to one of ordinary skill in the art at the time the invention was made. This would provide a mechanical locking and releasing system that offers simplicity, reliability, and low maintenance. From the further teachings of Lee, mounting the fork pin of Körber et al. via bearings in the bushing would have been obvious to one of ordinary skill in the art at the time the invention was made. This would help provide the fork pin with efficient rotational movement.

Claims 10, 11, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Körber et al. US 4,953,645 in view of Lee US 6,302,421 as applied to claims 1, 7, and 8 above, and further in view of Kovacs US 5,170,529.

Körber et al., as modified by Lee, do not disclose displacing the bolt via a pivot-lever arrangement or via a linearly displaceable lever, which is acted on by a pivot lever. However, Kovacs teaches the desirability of providing such a pivot-lever arrangement on a caster wheeled vehicle. See Figures 3 and 4. The bolt 50 can be displaced via a pivot-lever arrangement 26, 44 in which the bolt 50 is displaced via a linearly displaceable lever 44 acted on by a pivot lever 26. See Figure 4. Also, the pivot lever 26 has a rounded protuberance at its front end. See Figures 3 and 4.

From the teachings of Kovacs, providing the wheelchair of Körber et al., as modified by Lee, with a pivot-lever arrangement as claimed would have been obvious to one of ordinary skill in the art at the time the invention was made. Such a modification would provide a structure that efficiently actuates the bolts of each caster.

Allowable Subject Matter

Claims 12, 13, 17, 19, and 20 are allowed. Claim 12 requires the linearly displaceable lever to have a run on slope that interacts with a radial shoulder of the bolt. Claim 13 requires the pivot lever to be mounted on a spindle connected to the bushing. These features, in combination with the further limitations of the claim, are not taught by the prior art. In regard to claims 17, 19, and 20, the prior art does not teach an outer end of a steering linkage having both a horizontally running through-passage bore and a vertical bore, a vertically displaceable lever provided with a run-on-slope that interacts with the bolt, or two connected pivot levers with a pivoting motion initiated by a piston rod interacting with the fork. These features, in combination with the further limitations of the claims from which they depend, are not taught by the prior art.

Response to Arguments

Applicant's arguments filed October 25, 2006 have been fully considered but they are not persuasive.

In regard to the combination of Körber et al. in view of Lee, Applicant asserts that Lee cannot be relied upon as a teaching of a connection between a fork and a steering

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linkage since the vehicle of Lee uses driven wheels arranged behind a seat back, rather than driven wheels arranged in front of a seat back, and the system of Lee allegedly locks castor wheels 14 in the straight position, rather than acting to release or connect the steering linkage to the fork.

However, the arrangement of the driven wheels in the vehicle of Lee is not relevant to the combination since the arrangement of the driven wheels is established by Körber et al. Lee is relied upon as a teaching of a connection between a castor fork and a steering linkage and the features of the driven wheels do not have any bearing on the castor wheel system. Moreover, the system of Lee does not merely lock the castor wheels in the straight position as Applicant alleges. See column 8, lines 37-40, and column 9, lines 45-61. Rather, the system of Lee acts to release or connect the steering linkage to the fork such that castor 14 may move within a range of about 90 degrees, which satisfies the requirements of the rejected claims. See Figures 1B, 1M, and 1N; column 8, lines 49-50 and 62-67; and column 11, lines 45-55.

Applicant further asserts that the combination of Körber et al. in view of Lee lacks proper motivation for the combination and that the combination is based upon improper hindsight reasoning. The examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case,

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Lee provides at least a suggestion for the combination, as presented in the rejection above. Furthermore, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). Here, the teaching or suggestion for the combination is provided by Lee and not Applicant's disclosure.

In regard to the combination of Körber et al. in view of Lee and further in view of Kovacs, there are no deficiencies in the combination of Körber et al. and Lee that require Kovacs to remedy. Kovacs is relied upon to teach a specific feature required by claims 10, 11, and 14 only, and Kovacs provides a proper teaching of this feature.

Also, the previous rejections under 35 USC 112 have been withdrawn in view of the amendment to the claims.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Bottorff whose telephone number is (571) 272-6692. The examiner can normally be reached on Mon.-Fri. 7:30 a.m. - 4:00 p.m..

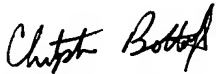
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Ellis can be reached on (571) 272-6914. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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A handwritten signature in black ink, appearing to read "Christopher Bottorff". The signature is written in a cursive, slightly stylized font.

Christopher Bottorff